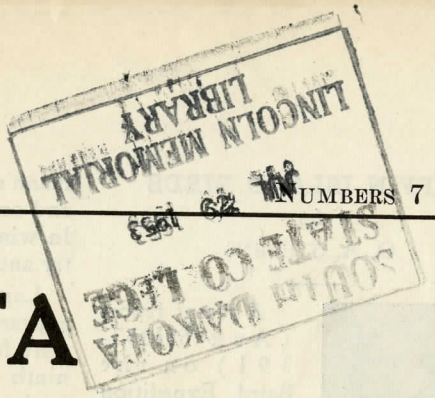
Library
State College



VOLUME 26 NUMBERS 7 AND 8

DAKOTA HORTICULTURE

JULY - AUGUST, 1953

Beautiful Sylvan Lake, in the Black Hills of South Dakota.—Courtesy of the Chamber of Commerce, Rapid City, South Dakota.

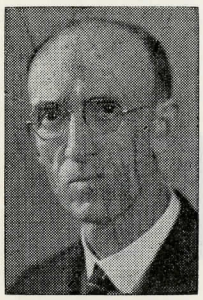
634.05
N811.63
Vol. 26
Nos 7-8

THIS BOOK DOES
NOT CIRCULATE

BAFFIN ISLAND BIRDS

by

O. A. STEVENS



O. A. Stevens

A recent report (Auk 69:353-391) on the Baird Expedition of 1950 gives extended notes on habits and is of interest to us because some of our transient and winter visitant species nest in the far north. The area studied was on the east coast at about the same latitude as the north coast of Alaska. The chief location was Clyde Inlet, a fiord cutting through mountains that not far away reach nearly 6,000 feet. The May, 1951, number of the Canadian Geographical Journal has a well illustrated general article on the area.

The notes deal with 39 species of birds, of which 24 are water birds. Of these water birds, loon, Canada goose, snow goose, old squaw duck, semipalmated plover, Baird's sandpiper and herring gull are known in the Dakotas. Other species seen here are roughlegged hawk, duck hawk, little brown crane, snowy owl and raven (formerly here). This leaves only seven kinds of small land birds but these were all common which the author says has not usually been true of other far north localities which have been explored.

Miss Habeger was interested in the identity of our horned larks. These notes will be no encouragement to her even though it is unlikely that the Baffin Island birds actually come to the Dakotas. He found that the horned larks seemed a complete mixture of Hoyt's, which ranges from Hudson's Bay to the Mackenzie River and the northern horned lark which nests east of Hudson's Bay. The author suggests that the two forms originally occupied separate areas but extended their ranges and came together. The first birds were seen June 6 and by July 8 young were nearly ready to fly.

In contrast to the horned larks, two kinds of redpolls were present and seemed to remain unmixed though they were living together. They ordinarily nest in trees but here were no trees so they used niches of boulders. Hornemann's redpoll was first seen May 27 and on June 9 greater redpolls arrived. In winter they move to wooded country and feed largely on birch seeds.

Lapland longspurs were common, appearing first on May 29. The young were found to leave the nest about the ninth day, their wings still in pin feathers and the youngsters quite unable to fly. Snow buntings were the most abundant of all. They arrived earlier than other species but did not nest earlier. Their most common nesting places were believed to be the inaccessible cracks in the cliffs. Often the birds were seen to catch flying insects.

At that latitude nests can be built only in the ground. It was observed that the wheatears,, redpolls and perhaps longspurs generally reused old nests. One nest of the wheatear was found to have eight distinct layers. This is a species unknown to us. It is related to our bluebird but is gray on the back with a white rump that shows when the bird flies. It inhabits open, usually stony ground. From the last fact a British name is stone chat. The European wheatear nests from Britain across Europe and Asia into Alaska and migrates to India and eastern Africa. The Greenland wheatear nests from Ellesmere Island to Greenland, Iceland and Quebec. It migrates through western Europe to western Africa. The author described them as spirited songsters, commonly singing in the air somewhat like skylarks and having some notes similar to those of the house wren.

The other small bird was the American pipit, a bird of the European warbler family, not closely related to the American warblers but perhaps seeming more like them than any other group. These proved to be common but somewhat local. They always nested on steep slopes and the nests were usually overhung by some heath plant.

Always do right. This will please some people and astonish others.—PRESIDENT EISENHOWER.

Son: "Dad, how much does it cost to get married?"

Father: "There's a small down payment of $2.00 and then monthly installments in the amount of your pay check for the rest of your life."—WISCONSIN HORTICULTURE.

JULY-AUGUST, 1953

VOL. 26 NOS. 7 AND 8

Entered as second class matter at the Post Office at Sioux Falls, So. Dakota, under the act of August 24, 1912.

Membership in the South Dakota State Horticultural Society is $1.50 per year. The subscription rate for affiliated organizations is 75 cents per year.

Published bi-monthly at Sioux Falls, South Dakota, by the North and South Dakota State Horticultural Societies. Address all communications to W. A. Simmons, Courthouse, Sioux Falls, S. D.

South Dakota Officers

Russell Rulon, President.....Yankton
Dr. S. A. McCrory, V. Pres...Brookings
W. A. Simmons, Secretary..Sioux Falls
H. N. Dybvig, Treasurer...Dell Rapids
F. X. Wallner, Librarian...Sioux Falls

Members of the Executive Board

J. M. Atkinson, 5 years.....Rapid City
H. R. Woodward, 4 years.....Pierre
E. A. Fletcher, 3 years.....Garden City
A. R. Schamber, 2 years.....Rapid City
C. I. Keck, 1 year.....Sioux Falls
Mrs. Leo Monteith.....Brookings
Mrs. R. G. Ferris.....Rt. 3, Sioux Falls

North Dakota Officers

R. L. Wodarz, President....Wyndmere
Dr. J. H. Schultz, 1st V. P.....Fargo
Henry Biel, 2nd V. P.....Lefor
H. A. Graves, Secretary.....Fargo
Earl Shaw, Treasurer.....Fargo

TABLE OF CONTENTS

Page

Baffin Island Birds.
O. A. Stevens.....50
Newslants. H. A. Graves.....51
Manitoba News Letter.
W. R. Leslie.....52
Your Yard and Garden.
Dr. L. Yager.....53
Experiences in Horticulture.
R. L. Wodarz.....54
8th Robertson Award.....55
Book Reviews. Mrs. L. N. Brakke....56
One Less Bridge.
Mary Louise Kinyon.....56
Lecture at Madison.
Mrs. D. S. Baughman.....56
Fruit and Vegetable Notes.
F. X. Wallner.....57
President's Message.
Mrs. Leo Monteith.....58
Awards. Mrs. G. M. Jorgensen.....59
Garden Club Gleanings.
Mrs. R. G. Ferris.....60
The Far North. P. H. Wright.....61
Secretary's Corner.
W. A. Simmons.....62

NEWSLANTS

by

H. A. GRAVES

Graves

President R. L. Wodarz has recently rounded up and sent in the dues for twenty new members of the Horticultural Society. This is a fine precedent for the rest of us to follow. If each member of the Horticultural Society would send in one new member each year, we would soon have a booming organization. We still haven't given up the idea of launching a membership drive this fall, perhaps in September and October. I have contacted quite a few of our members already who have expressed willingness to go out with a few copies of the magazine and try to get additional members. We are also planning to prepare a fact sheet which they can use in talking the merits of belonging to the organization.

While we are discussing President Wodarz, we would like to remind you again that he propagated and donated to the first 70 or 80 members who wrote in one of three varieties of apples. These apples are very much worthwhile, and several people attempted to buy any amount of some of the varieties. Mr. Wodarz turned them down with the remark that he wanted more people to get interested in fruit and have as much enjoyment out of it as he has had over the years. I don't think that this requires any further comment.

Going back to the shipment of the apple trees, we are sorry about the way it turned out; but we live and learn. We know better now and will not ship the same way again; however, we feel that the apples are worth the price paid since they are outstanding varieties in our opinion, and you who received them are getting the first chance at them.

Folks who tried some topworking of various fruit trees report good success this year. We have not checked on the results we had at our topworking demonstration at several points in North Dakota, but we plan to send out a letter to the counties soon. Personally in our own yard we tried seven grafts on a lilac, when both the stalk and scion were in full leaf. We selected dormant buds on known varieties for our scion wood and grafted them all onto vestale, a single white lilac. The temperature was 88° the day I did this topworking, and the sap was practically running out of the stock. I was afraid it was all for naught, but tried it anyhow and was pleased and surprised when all seven of the grafts grew. I was so sure they wouldn't take that I did not label. As a consequence, I will have to wait until they bloom to identify. I do know the trees from which various scions came.

This idea of grafting several lilacs of different colors unto one bush is not original with me. I think the first time I saw it was in a picture in the "Flower Grower" a few years ago. I think it would make a very novel bush to have a lilac with blooms of several different colors and types of flowers growing on the same bush. Better plan to try it next year. I do not recommend to all people that they graft as late in the season as I did, but apparently if everything else is all right, they will taken even at that late hour.

We are becoming a very messy people. As I drove along our highways this spring on my various schedules, I could not help but notice crews of our State Highway Department driving down the ditch with a truck picking up cans, bottles and trash some of which once held drinks, both hard and soft, and throwing them into the truck. This prompted us to write our State Highway Commissioner, Mr. S. W. Thompson, and inquire if he had any idea what this unnecessary spreading of litter costs the Highway Department annually. Mr. Thompson very graciously took the time to make the survey and estimated that the cost runs from $2.00 to $3.00 per mile up to $60.00 per mile and more as we come near our larger cities.

Assuming that the cost averages out to $10.00 per mile, it would mean $63,000.00 on the mileage which the state now maintains, and this would not include the loss of time of the mowing crews in stopping machines to remove articles which the pickup crews missed or which were deposited along the right-of-way after the spring clean-up took place. Nor does it include the probable repairs necessary to equip the machinery which was damaged by broken glass and empty beer cans.

It is practically an impossibility to patrol every mile of road to prevent this type of thing, but it is really too bad that we humans do not have pride enough to quit such an unsightly, expensive practice.

I have on my desk a new publication, in fact the first issue of it, known as the "American Vegetable Grower." This is to be a monthly publication, and it is to cover the vegetable field in the same manner the "American Fruit Grower" covers the fruit field. Perhaps there are some of our members who would like to subscribe to this magazine. It is too new for me to comment on it very much, but if it is as good a magazine in the vegetable field as the "American Fruit Grower" has been in the fruit field, it should be of more interest to us here in the upper Midwest since there are many more of us growing vegetables than there are members growing fruit. The magazine is similar in size and makeup to the "American Fruit Grower."

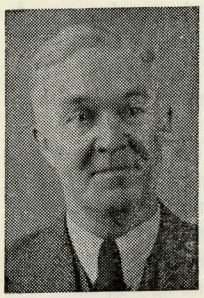
Some very fine specimen of spruce trees, many of them good Colorado Blues, in the city of LaMoure, North Dakota, are dying for some reason which has been very difficult to discover. The branches start to die near the base of the tree, and the mortality moves upward usually a branch at a time. There has been extensive damage to some of these trees by the Yellow Bellied Sapsucker, a black and white woodpecker with a creamy colored breast. These birds, according to O. A. Stevens, nest here to some extent, but most of them migrate through. They fly in for a few days, do considerable damage and are gone before you notice what they have done. Many people believe these Sapsuckers drill into the trees to get at insects under the bark. This may have got them started, but they developed a taste for sap, and especially for spruce sap which is a detriment to the trees. County Agent, Henry Ness, of LaMoure County, has re-examined these trees and has found some of them dying which have very little Sapsucker injury so perhaps there may be a combination of causes or some cause that we have not yet discovered. At any rate many of the folks in LaMoure are just sick over the fact that so many of their trees are dying

(*Continued on page* 59)

MANITOBA NEWS LETTER

by

W. R. LESLIE



W. R. Leslie

A few observations are recorded on the early spring situation in the *ORCHARDS* at the Morden Station. All fruit plants came through the winter in very good to excellent condition with two exceptions. In tree fruits even the most tender varieties of apple, plum, apricot, and cherries under test show all of last year's growth to be in prime condition right to the tips. The exceptions to a nearly perfect winter survival are strawberry and raspberry.

Heavy mortality has occurred in last seasons runner plants of strawberry. In most varieties the mother plant and early set runner plants are initiating strong new growth since the recent rains, but the bulk of runner plants are weak or completely dead. It is still a little too early to determine the full extent of plant losses and injury to the remaining, or to report on varietal differences. Tentatively, this loss is attributed to the very scanty soil moisture situation last summer that prevented rapid and satisfactory establishment of the young plants. Although last winter's temperatures were relatively mild, the almost total lack of snow cover over the straw mulch gave insufficient protection to the late formed runner plants.

It appears at present that the raspberry suffered even more severely than the strawberry. Killing back from the tip of the cane and injury to buds scattered over the canes is severe. In the fall of 1952, canes in part of the plantation were bent down and the tips covered with soil; the balance were left standing. The difference in freedom from injury to the canes is very marked between the two treatments. The uncovered canes were much slower to commence growth and injury to buds was far greater. Covered canes of standard varieties such as Chief and Latham show strong growth from most buds at the top of cane, or the portion covered with soil, while the basal portion has relatively little new growth. The advantage in favor of covering is marked. Among varieties where part of canes were unprotected Chief, Sunrise and Honeyking are in the healthiest condition. Although the tops have killed back one-quarter, growth from there down is good. Latham and Glenelm No. 5 killed back one-third to a half with some bud thinning lower down. Most others such as Viking, Newburgh, Muskoka, Tweed, Milton, Gatineau and Rideau are more or less dead to the ground. Among varieties with canes covered, Chief and Latham are in best condition, Madawaska is fair. Several varieties, including Van Dyke, Lloyd George and Taylor were dead to ground line. A big surprise occurred in Washington. While this variety was all tip covered buds over the entire cane are alive and active. The stiff, upright canes have regained their position after release from the soil cover and at this stage look promising.

The very dry soil condition in the fall and winter, plus lack of snow cover is considered as mainly responsible for the injury.

During April emergence of all fruit plants from dormancy into active growth proceeded at a slow but very satisfactory rate. The heavy crop of flower buds expanded in splendid fashion, promising to give an almost ideal condition for a heavy set of fruit.

Beginning on May 5th maximum temperatures rose to 81° F. and for the next three days highs of 87°, 89° and 87° F. were recorded. These temperatures forced all apricots, the early plum and early pear and many Nanking cherry into full bloom within two days. Rain began falling on the evening of May 9th, turned to snow during the night of May 10th and blanketed all trees and blossoms. Temperatures fell to 30° F. on the 11th, and with a strong wind all day froze the soft, wet snow right into the blossom clusters. During the nights of May 11th and 12th minimum temperatures of 25° and 27° F. occurred in the theremometer box, and 22° and 24° F. recorded on the ground. Heavy damage to fruit blossom resulted. Examination of trees on May 14th revealed apricot bloom almost one hundred per cent destroyed; ninety per cent of flower pistils on early plum, such as nigra, salicina and ussuriensis types, were blackened; on early pear all flowers in half to full balloon stage or opened showed blackened pistils, and probably fifty per cent of the Nanking cherry blossom was destroyed.

Subsequent developments reveal the following picture at the end of May. In a miraculous way enough blossom escaped the frost injury that apricot, early plum, early pear and Nanking cherry have set a few fruits scattered over the tree. The northern limit strain of Nanking cherry were a week later in blossoming than the larger types such as Drilea and Orient. They flowered in favorable weather and have set a good crop of fruit.

Late pear, plum, apple and sour cherry produced an excellent crop of blossom but the set of fruit is uncertain at present due to unfavorable pollination conditions. During May, principally from May 9 to 31, 4.47 inches of rain has fallen, scattered uniformly over that period. Since May 22 rain has fallen on eight days, and in that time the sky has been mostly cloudy and showery, with only a few sunny spells. Bee and other insect activity has been at a minimum, and it is feared that the fruit set may be low. Fruit breeding was started in the orchard on May 20th. Rain fell after nearly every phase of hand pollination, necessitating repollination once and frequently more often. The percentage set of fruit under these conditions is an unknown quantity at present, but should constitute an interesting test.

Some frost injury was encountered in the apple, late plums and pears. In apple the pistils in the center flower of the cluster were often found destroyed. Frequently two, three or more of the flowers in a cluster were frozen sufficiently in early May that they failed to develop further. The presence and extent of these conditions varied with the variety and were noticeably worse on the north and northeast sides of the trees. In only a few cases, notably Red Melba and Patricia, were most of the flowers thus affected. In most varieties there was more than ample undamaged flowers to give a heavy set of fruit. Much of the foliage present at the time of the frost has developed poorly. The leaf blades are considerably wrinkled and twisted. New leaves have emerged and are rapidly covering over the frost scars.

YOUR YARD AND GARDEN

by

LEONARD YAGER
Assistant Horticulturist
Montana Extension Service

Yager

Snap Beans for the Home Garden

Snap beans rank second in popularity as a home garden vegetable. Green podded varieties are much more popular than the yellow or wax types. Both flat and round podded varieties exist, but in general the round podded types are better in quality though flat podded types are extremely heavy yielders. Also bush and pole, or climbing, varieties exist with some gardeners preferring the latter type because of their high yields. Plant breeders have been active in recent years in improving quality and introducing greater disease resistance into the garden bean.

Virus and bacterial diseases have made bean growing more difficult. Bacterial blight and halo blight are carried from generation to generation within the bean seed, so once established, this disease is difficult to eradicate. It is advisable for most home gardeners not to save seed from year to year because of this bacterial disease problem. Bean seed crops raised in Idaho are free of this disease, so it is desirable to obtain seed raised in these disease-free areas. Gardeners are not usually aware of the original source of their seed, so should seek to buy seed only from the most reliable sources.

A new green podded bush bean called Topcrop is an outstanding new variety. It was bred and developed by Dr. W. J. Zaumeyer of the U. S. Department of Agriculture. It is highly resistant to common bean mosaic, an important virus disease of beans. It is early and a very prolific yielder.

Contender and Tenderlong 15 are both round podded green snap bush beans of high quality and are heavy producers. Tenderlong 15 is mosaic resistant. Wade is another brand new introduction of the U. S. Department of Agriculture. It is a few days later than the varieties mentioned above. It was a winner in the All America trials in 1952. Once these four new varieties have had more trial, they are bound to replace many of the old varieties sold in the trade at the present time. Two new wax or yellow podded bush beans are Puregold and Cherokee. Puregold is a little late, but is extremely vigorous and productive over a long season. Cherokee is earlier and noted for its well colored pods and high productiveness.

Gardeners should remember that beans are a warm season crop and as such, do not tolerate cool temperatures. They are extremely susceptible to frost injury. It is not advantageous to plant beans in the garden until all danger of frost is past and until the air temperature warms considerably. Little advantage is gained by planting beans while the soil is still cold.

Treatment of seed with a fungicide such as Spergon aids greatly in producing maximum germination from bean seeds.

Sweet Corn Is Popular

Sweet corn ranks third in popularity of all home garden vegetables. It is definitely a warm season vegetable and does best in areas where the days and nights are warm. Cool nights, such as experienced in higher altitude areas, has a delaying effect on maturity of sweet corn. Hence, the days to maturity quoted on seed packets does not hold in higher altitude areas, or in other areas where the nights are cool.

In the past, very early varieties of sweet corn of good quality were not available to any great extent. At present, a great number of new hybrid varieties have been introduced that will mature even in areas where it was thought the season too short, or unsatisfactory for the growing of sweet corn. Most of these varieties are of reasonable good quality, although they do not measure up to the quality of a Bantam corn. Many of these varieties are not too generally available, so the gardener may have to do a little searching through seed catalogues and seed stores before he is able to find them.

The North Star has been rated as an excellent early variety because of its extreme earliness and ability to produce heavily. Its extreme vigor, and ability to withstand unfavorable climatic conditions, such as a spell of cold weather during the growing season, has been noted in some gardens. It has been surpassed in quality, though, by newer hybrid varieties.

Early Golden 1.13 has shown up well in a number of plantings as early, and quite productive. Sun-up is another good early hybrid of fine quality.

Several of the Seneca hybrids are very promising early varieties for short growing season areas. Seneca Dawn produces a heavy early yield of good flavor sweet corn. Seneca 60 has quality, productivity and lends itself well to freezing. Seneca 60 x C13 and Seneca Arrow are others of this group. The Seneca Arrow is a little later than the others.

Other early maturing varieties of note are Spancross C13.3, Improved Carmelcross C30.13, Golden Rocket, Sugar Prince, Early Pioneer, Alpine Bantam and Golden Honey. Gold Mine is a very new one that deserves more testing.

Naturally, the choice of a very early maturing sweet corn variety must be made by those who are in short season areas, or in areas where nights are cool such as high altitude areas. However, these early varieties can be used in other areas where the growing season is longer in order to be first with sweet corn in the garden. In such areas, the major part of the planting can be made up of midseason maturing varieties for the main crop.

Golden Bantam has been unsurpassed in quality. However, there are many strains of Golden Bantam on the market and some are very inferior in quality, type and other characteristics. Gardeners should always buy the best strains of Golden Bantam sweet corn available on the market. A true Golden Bantam variety always has eight rows of kernels.

In recent years the new hybrid variety of Golden Cross Bantam has come to the fore. It is late mid-season in maturity and will do well in areas where there is a longer growing season. This variety has excellent quality. Like all hybrid varieties, the plants as well as the ears of corn exhibit remarkable uniformity. Golden Cross Bantam is 10 to 14 rowed. It was originally developed at Purdue University.

Lettuce Varieties for the Home Garden

BOZEMAN—Lettuce is the most popular salad crop in the home garden.

(*Continued on page* 63)

MY EXPERIENCE IN HORTICULTURE

by

R. L. WODARZ

Wodarz

Before I started planting any fruit trees on my farm, I had a background of experience which in most cases was only superficial with me, not directly interested, as my mind those days followed some other direction. It was back in 1906, when, during the harvest season I was helping out near Austin, Minnesota, we were stacking grain. A shower passed by and farmer Clough said to me, "We had better take some of those apples to town." We gathered a few bushels and did not have any more sense than to shake most of them down. Sizing this little orchard up, it looked to be some 30 years old and the trees were growing in sod. As to what varieties they were I was not interested to find out.

The next year I spent a pleasant summer at the Alex Eastvold farm. some distance north of Winnebago, Minnesota. Here was a thriving apple orchard of one acre and the only protection this acre had was along the south side. Trees grew in sod, were healthy and productive. This orchard looked to me to be near 20 years old and there were several varieties, however, my knowledge of the different kinds were nil. The boys would talk of Whitney No. 20, which they seemed to prefer to others. There were also some giant black walnut trees, but what interested me very much were the many mulberry trees, as the berries were simply delicious, very large. Some were red, some yellow, others black. I have tried to raise Russian mulberries here in North Dakota, but as to size and taste, were much inferior. Wish some plant breeder would get hold of these and if he can produce hardy trees with the size and quality I sampled near Winnebago, it surely would be worthwhile. I realize this has no commercial value (forgetting about silk worms), but it would be nice to have some around the home. Another fruit plantation in my mind was the N. C. Jensen plum orchard, a little ways north of Wyndmere, N. D. It was planted to some select native varieties like Cheney and others. Here were no hybrids or plum-cherries but every fall the folks around here were looking forward to the Jensen's plum day. As the crowd arrived there was a political speech by the owner and after the sampling of the fruit by all of us, the fruit was sold by the tree. What struck me was how this orchard in sod would do so well. There were no offshoots and the sod was more like a closely mowed lawn. I deducted that this particular orchard was very carefully grazed by sheep. All this happened before the dry years of the thirties. Then this quarter section of land and a lot more nearby was bought by the Federal Government as submarginal land. Now coming back to my first fruit tree planting, it was done in sod. The nursery agent did not enlighten me of how not to do it.

Hot, dry spells would come, the competition for moisture from grass and nearby trees was too much, and in two years or so they went out. This sort of thing discourages a person, so I gave little thought to fruit planting for a few years. By and by, the urge to plant was around again. With nursery agents visiting and catalogs showing up, fruit planting was started again. With more knowledge of how to take care of young trees, and timely advice from Horticultural societies, success came along. This time all nursery stock was planted in cultivated ground and taken proper care of. Most varieties were as recommended by the local horticultural society. But planting of this orchard was too close. Cultivation had to be abandoned and grass took possession. Then came the dry years, and this first orchard went slowly out of existence. Before this happened, I had another orchard started and the trees I was getting now were mostly from the several experiment stations, offered by the horticultural societies. By and by I learned how to propagate the several fruit trees and got by nicely by getting only scion wood. Those were mostly Haralson, Wedge, Prairie Spy, Beacon, Fireside, etc., from Minnesota Fruit breeding farm. Anoka, Dolgo, Wakpala, Caramel, Redflesh and many more from Dr. Hansen at Brookings. Milton, Melba, Kendal, Early McIntosh from New York Fruit Testing Association. As time went by I kept on planting till I had a five-acre patch. Rows of trees being about three rods apart and the space between is kept cultivated, the purpose being to conserve moisture, and in case of prolonged drought trees would have a good chance to survive. The past few years have been very kind to us, as there was plenty of moisture, no really bad winds and no hail. Fruit was abundant the past 5 or 6 years and 1953 seems to herald another good apple year. With lots and lots of moisture, this year, one

(*Continued on page* 59)

The PIONEER SEED HOUSE

Nursery-Greenhouses of the Northwest

FOUNDED *at* BISMARCK
in DAKOTA TERRITORY
in 1882

WRITE FOR CATALOGUE
MAILED UPON REQUEST

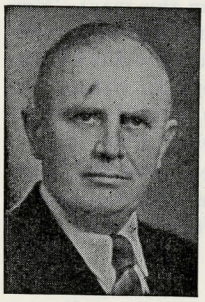
OSCAR H. WILL & CO.

BISMARCK, N. D.

EIGHTH ANNUAL ROBERTSON AWARD

by

H. R. WOODWARD



H. R. Woodward

This award has been made possible through the permission of Judge Turner Rudisell of Rapid City, judge of the Seventh Judicial Circuit. It is paid for from funds left by Mr. Robertson at the time of his death.

It has been the custom in all cases to present the gold medal to someone who has made an outstanding contribution to horticulture or any of its closely related fields in plant science. It has been made to men of research, of plant study and development, to work in horticulture, to men who have devoted long years of work for the Horticultural Society and in one instance to a woman who has done much for the promotion of Garden Club activities in South Dakota. There is nothing in the rules which says it could not be given to someone in some other neighboring state.

It has been bestowed upon men of various ages, some of whom have been past 80 and had their life's activities behind them. It has been given to men in the prime of their chosen profession. This year it goes to a young man, only 33 years of age, who has done a significant piece of work along the line of forestry, conservation, fire prevention, timber research and timber management in South Dakota.

He has promoted the harvesting of mature timber on state-owned lands in line with the best present day practices in forest utilization. It has brought in considerable money to the state and the Permanent School Fund which might have otherwise been lost through waste and decay.

He has directed the operation and planning of many of the recreational areas as well as promoted their establishment. Through his efforts the amount of Federal appropriations for fire control in this state have been tripled.

He has encouraged the establishment of "Tree Farms" and has been active in the "Keep South Dakota Green" program. He has cooperated with the Horticultural Society and the State Federation of Garden Clubs. He has been a prime factor in the establishment of many roadside picnic sites and their development. He has organized fire control on a county-wide basis.

Harry Woodward was born in Hot Springs, South Dakota, and was graduated from the Hot Springs High School in 1937. He was graduated from the Utah State Agricultural College in 1941 with high honors. He is a member of many college societies and honor societies and played football. He has always been interested in forestry and went west to school because South Dakota does not have a forestry school.

He participated in college military and received a commission as Second Lieutenant upon graduation and spent five years in World War II. His highest rank was that of a major in Anti-aircraft Artillery. He served in New Guinea, on Guadalcanal and in the Netherlands East Indies. He was decorated for action on Morotai Island.

After returning to civilian life in 1946 he accepted a position as small game technician with the Department of Game, Fish and Parks and was stationed at Huron. In a few months he was made assistant state forester and was given charge of the timber operations and fire protection in Custer State Park and lived at Custer. Since 1948 he has been South Dakota State Forester. He has charge of all the forests and recreational areas under the South Dakota Department of Game, Fish and Parks.

Being a member of the Society of American Foresters and the American Association of State Foresters, he received national recognition in 1951 by being chosen a member of the executive committee and is active in his field on a national level.

Harry was married in 1940 to Miss Theone Weldon, a high school classmate. They have three children, Terry, Kaye and Robin and live at Pierre. Mrs. Woodward is active in musical circles and directs the Congregational choir.

He is very much interested in the work of the Horticultural Society and Conservation Education. He is a hard worker who speaks and writes effectively and is always willing to offer his help to various groups in the state. His hobbies are hunting and fishing. His favorite hunting grounds happen to be the Limestone areas of the Black Hills and his favorite fishing streams are in the Wind River Mountains along the Continental Divide in Wyoming.

Outside of his field he finds some time to devote to Boy Scout work.

Harry, may I present this medal to you with the following inscription on the back:

"For significant public service of enduring value to South Dakota in forestry and conservation."

FOR SALE

by the

WAYS and MEANS COMMITTEE OF THE STATE FEDERATED GARDEN CLUBS

Book, "Pioneer American Gardening," edited by Mrs. Elvenia Slosson. A most interesting book, with articles from every state in the Federation. Should be in the reference library of every club.
Price 3.75

Talabels, the most practical garden label, 100 in pack.
Price Per Pack 50c

Green Thumb Garden Gloves. Will help in giving you the "green thumb necessary to produce the best of gardens."
Price Per Pair 1.00

Floral Ribbon, most all colors.
Price Per Pack 15c

Typewriter Paper, bearing Federated Garden Club Seal.
Price Per Sheet 1c

Address all orders to . . .

Mrs. Francis Bingen
ANDOVER, S. D.

BOOK REVIEWS

by

MRS. L. N. BRAKKE

Mrs. Brakke

Diagnosis of Mineral Deficiencies in Plants, by Dr. T. Wallace. Second edition. Published by Chemical Publishing Co., Inc., 212 5th Avenue, New York 10, N.Y. Price, $10.

Farmers, fruit growers, and gardeners will get valuable information from this book on plant deficiencies.

There are 314 full-color plates, showing the external symptoms of various plant diseases, and suggestions for the proper treatment. Since plants obtain their supplies of mineral nutrients from the soil it is necessary that we should have some knowledge of soil conditions in order to understand the problem of mineral deficiencies.

☆

Period Flower Arrangement, by Margaret Fairbanks Marcus. Published by M. Barrows and Company, Inc., 425 Fourth Avenue, New York 16, N. Y. Price, $10.

One of the first books on historic flower arrangement to be published. For fifteen years this book has been in preparation. The story starts with 2800 B.C. in Egypt, and comes up to the present time through Greece, Rome, Persia, China, Japan and America. This book contains 72 historic uses of flowers, 8 of them in color. Information and reproductions have been obtained from museums all over the world. A book for flower arrangers and flower show judges. A book for your club library.

☆

Insect, Fungus and Weed Control, by Dr. E. R. DeOng, published by Chemical Publishing Co., Inc., 212 Fifth Avenue, New York 10, N.Y. Price, $10.

The use of chemicals for insect and weed control and seed disfectants has developed rapidly during recent years. Many new compounds have been found for specific purposes. Careful use of insecticides has led to an annual increase of 20 tons per acre of sugar cane. More marketable fruit and millions of board feet of lumber has been saved from loss by insects; a larger profit for the farmer from an increase in milk and meat from the control of flys, and great progress has been realized in the control of insects that have damaged the agricultural crops. This is a practical text book for the college student, schools of agriculture and the farmer. Chemical names of many products on the market are given and their uses.

ONE LESS BRIDGE

by

MARY LOUISE KINYON

I used to worry about my heart.
Afraid it would stop and never start.
A dreadful thing—this—for me
As I would be quite dead, you see.

But I have learned of dread diseases,
And pain that only an opiate eases
Dreadful things they cannot cure,
Folks for months and years endure.

Why then worry about my heart
If it should stop and never start?

LECTURE AT MADISON

by

MRS. D. S. BAUGHMAN

The Madison Garden Club announces that Carl Starker, nationally known expert on floral arrangements, will give a demonstration lecture on floral arrangements at Madison, July 29. Mr. Starker produces floral arrangements on the stage before his audience, explaining his processes and the artistic principles involved, as he makes the arrangements. Photographs of his work have appeared in many national magazines, particularly those devoted to gardening. He has taught flower arrangements in schools arranged by the National Council of State Garden Clubs, has lectured in many cities and is the author of books on the subject. The Madison Garden Club expects a number of garden club members in other cities of South Dakota, to attend, as it is the opportunity of a lifetime to see and hear this expert. Admission is one dollar.

RADIO-TV GAG BAG

Culled by

LARRY WOLTERS

BEN GRAUER has a friend in Congress who explained how to become a successful politician in this way: "You have to have the friendliness of a child, the perseverance of a bill collector, the docility of a lap dog, the patience of an adoring wife, the curiosity of a cat and the amiability of an idiot."

JOHN CAMERON SWAYZE tells about seeing a sign in a Chinese restaurant which read: "Food served to you Peiping hot!"

ROD BRASFIELD describes frustration as the feeling you have "when you're lying in the barber's chair with your mouth full of lather watching the shoe shine boy trying to give another customer your hat."

GALEN DRAKE defines a budget as "a method of worrying before you spend the money instead of afterward."

ERNIE SIMON says a girl doesn't need to worry about her family tree if her limbs are all right!

BILL CALLEN has observed that "drive-in theatres can be found in any neck of the woods."

A fan describing MARIE (IRMA) WILSON and her boy friend, AL, said: "They are a perfect couple. What she lacks he doesn't have either."

ARLENE FRANCIS spotted this one in the classified ads: "HOUSE FOR SALE. All brick and a wide yard."

A contestant told GROUCHO MARX about all the jobs he had had, none of which ever brought him much advancement. "I also used to shoot off dynamite in the mines," the guy continued, "but I didn't like that job too much." "Well," shrugged GROUCHO, "with a job like that you can get to the top in a hurry."

ROBERT Q. LEWIS knows a girl who took the first prize at a beauty contest, "but they made her put it back."

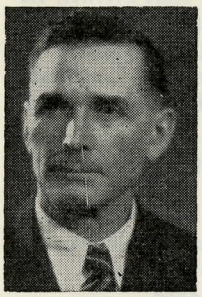
DAVE GARROWAY tells of a guy who accidentally drank shellac. "He had a lovely finish," said GARROWAY. —CHICAGO TRIBUNE.

You can't take it with you—the the government gets it before you do. —CUBA CITY NEWS HERALD.

FRUIT AND VEGETABLE NOTES

by

F. X. WALLNER



Wallner

Some friends have asked me to tell more about Hawaii, so I thought perhaps the pineapple would be a good topic as it is the most interesting industry on the Islands. Christopher Columbus discovered the pineapple on the Isle of Guadaloupe, in the West Indies. It came from tropical South America before that and explorers brought it to other parts of the world, and finally to Hawaii, where it found its real home.

Its cultivation progressed to the point where it now brings refreshment to millions, all over the world, jobs and security to many thousands throughout the Hawaiian Islands. The history of this industry and the story of farming and processing methods which it has developed, provide a fascinating subject for study. In 1535, 42 years after the pineapple was discovered by Columbus, the first known picture of this fruit appeared in Universal History of India, published in Seville, Spain. "India" was the Spanish name for the new world we now call America. About 1590 the pineapple had been carried to the real India, China and the East Indies and to Africa. In colder countries like England, France and Holland, wealthy people grew this rare, delicious fruit in greenhouses. Later, in New England, the pineapple became a symbol of hospitality, its likeness was carved on gate posts and doorsteps in towns to which sailors returned from long voyages in Clipper ships among southern islands. It is not known when it first came to Hawaii but is supposed to have been brought in by Spanish sailing vessels. In 1813, a Spanish friend, physician and councellor of sorts to the King Kamehameha, planted the first pineapple in his garden. This Don Francisco must have been a real horticulturist, because he brought many plants from other lands to plant in Hawaii's soil. During the gold rush in California, small, fibrous, sour pineapples were growing wild in Kana, on the big island. They were picked green and shipped to California, but most of the fruit spoiled on the long voyage and was thrown overboard. Captain Kidwell was searching for a better, larger, juicier, sweeter pineapple. He found the smoother Cayenne variety in Jamaica and imported 1,000 slips, and this is the variety now grown in the Islands.

This fruit spoiled quicker in the vessels than the small sour wild ones from Kama, so in 1892 this same Captain Kidwell started the first pineapple cannery. About 1900 James D. Dole and a few others, started Hawaiian Pineapple Co. Today the industry is one of the two principal mainstays of the territory's economic life. Seeds in pineapples spoil it for canning or eating and there are very few that have seeds in them and seed is never planted. Slips or suckers from the base of the plant or the crown, from the top of the pineapple, is what is used for the plants. When fully grown, 3½ to 4 feet tall, it has over 100 long, spiny leaves that are about 3½ feet long. After about 20 months the fruit is ripe.

On harvesting, each weighs about 5 pounds after being trimmed. The climate is ideal here for the pineapple but the soil needs special care and fertilizer, to produce fruit year after year; about 17,500 plants are set to the acre. When the peak harvesting time comes, the machines move through the field day and night. The canned pineapple and juice in 1950 was about 40 million dollars. The pineapple company in 1950 received about 52 million dollars. Paid for material over 14½ million dollars, goods and services 6½ million, fruit produced, near 3 million; most all fruit is grown by the pineapple company. All the pineapple from the company's own Island of Lansi is transported to the Honolulu company by tug and barge. Depreciation is 1½ million, dividends to stockholders over 2½ million, taxes near 5 million, salaries and benefits 16½ million. At the peak of operations there are 6,000 people in the cannery and 2,000 in the field; they farm about 26,000 acres, and 300,000,000 plants under cultivation, 85 million new plants are set out each year, and there are 1,500 miles of terraces and drainage ditches. The canning company covers 57½ acres, capacity of warehouses 6 million cases. Record days pack 5,600 tons, maximum number trimmed per minute 2,842, cans packed per minute 4,010. The cannery has processed fruit at the rate of 4½ tons per minute, up to 1,400 cans per minute or 23 per second. A single pineapple passes through the entire processing operation in about 15 minutes. While the meat packer processes everything but the squeal of the pig, the pineapple company uses every bit of the pine, as the shell is ground up into pineapple bran, for livestock, 170,000 100-pound bags are produced. Also 600,000 pounds of citric acid is produced. This is just a short story of one of the big industries of Hawaii. Sugar and cattle are two others; only one ranch in the mainland, the big King Ranch in Texas, is larger than the Parker ranch on one of the Islands.

NEW LAWNS

Be sure you have six inches of topsoil rich in humus (old manure dug in). Don't fool around testing for acidity—put on 25 pounds of lime per square foot. (Too much lime will give you too much clover.) Rake in the lime, and water the area. Don't be in a hurry about seeding—you want the freshly dug soil to settle. Then put 50 pounds of 0-10-10 fertilizer. (This means that you have no nitrogen, except that already in the soil, but you do have plenty of phosphorus and potash for root and body strength.) Rake in finely and water the area some more.

After you can't stand the look of the barren ground any longer rake it lightly. Then seed. Put the seed on so thickly that the formerly barren ground looks as if it had been heavily salt-and-peppered-like a pork chop. Then, and this is important, drag it. Drag lightly three times, round and round and up and down. This will cover 80 per cent of the seed to the proper depth—the rest will be too deep or on the surface but you can't do anything about it. Now roll it. (Don't worry about foot marks or indentations, they can be filled in later.) And keep it damp. Cut the grass when about 3" high and set the mower as high as it will go.

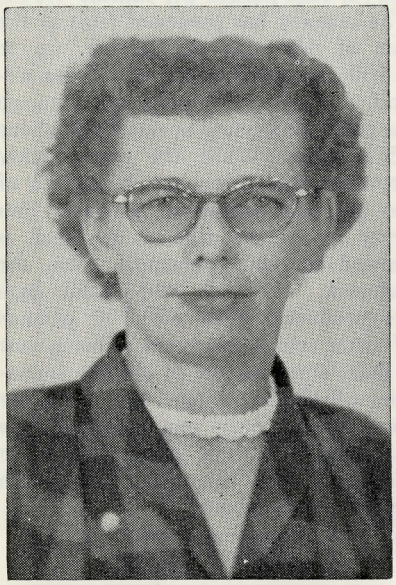
At this point all you have is a very

(*Continued on page* 64)

PRESIDENT'S MESSAGE

by

MRS. LEO MONTEITH



The South Dakota Convention at Britton June 22-24 is history but to over 200 gardeners its memories of hospitality, fellowship, and learning together will be cherished.

Mrs. Arthur Bonham, general chairman and members of the three garden clubs, Start-A-Plant, Ever-Growing, and Home Garden made arrangements. A Flower Show on Sunday was judged by Mrs. Baughman, Mrs. Jorgensen and Mr. Bush, and opened to the public with 350 viewing the display Sunday afternoon.

A buffet dinner was served at the Dr. E. M. Drissen home to members of the Board of both the Horticultural Society and the Garden Clubs followed by a meeting of the Garden Club Board.

National Consultant Mrs. Edgar Irving, Omaha, director for the Rocky Mountain Region spoke on Iris varieties on Monday afternoon. The morning session was routine convention opening reports for both organizations.

Our own Mrs. Jorgensen drew from her wide travel experience to reveal how people in all climates "Live with Flowers." She also explained the standards for the awards.

Mrs. Anna Hausen, Clarinda, Iowa, lectured and demonstrated church flower arrangements.

The banquet had Judge Harold King, Britton, speaking on the history of Fort Sisseton in keeping with the theme of the convention "Meet Northeastern South Dakota." Table favors were individual potted plants.

Tuesday morning at the president's breakfast every club had a chance to tell of its activities and outstanding achievements. Later the convention heard talks on fruit growing in North Dakota by Mr. R. L. Wodarz, and in our own area, by Louis Block. Dr. S. A. McCrory showed slides of new plants in development at South Dakota State College.

Mrs. Earl Kindred presented a report from the National Convention at San Francisco. Miss Ruth Habeger of Madison talked on birds.

Mr. Eldred Buer told about his model farm near Canby, Minnesota. Twenty cars joined the caravan to tour the lake country, old Fort Sisseton area, and then the Block orchard and Buer farm in Minnesota on Wednesday to culminate a most successful convention.

An invitation for next year's convention is open. Should your town wish to be hostess for the 1954 State Convention, please write to me before July 29 so that the Board can make a decision as to a date and place.

The Garden Club Board members will meet at Madison on July 29th at 2 p.m. That evening Carl Starker, nationally famous arranger will demonstrate flower arranging. Tickets are available to everyone, available through Mrs. D. S. Baughman, Madison.

Mrs. Frances Bingen of the Andover Garden Club, Andover, South Dakota, is our new Ways and Means chairman. If your club would like stationery, garden gloves, books, etc., just write to Mrs. Bingen.

For your year book information, the newly elected national officers are:

President, Mrs. William J. Walters, New Jersey; first vice president, Mrs. Bradley Morrah, South Carolina; second vice president, Mrs. Daniel J. Mooney, Montana; third vice president, Mrs. Jamie Johnson, Michigan; treasurer, Mrs. C. B. Nettleton, Virginia; assistant treasurer, Mrs. William Hamilton, Maryland; corresponding secretary, Mrs. Chester Schomp, New Jersey.

South Dakota state officers are:

President, Mrs. Leo Monteith, Brookings; first vice president, Mrs. E. M. Kindred, Miller; second vice president, Mrs. F. Nelson, Hurley; corresponding secretary, Mrs. R. G. Ferris, Sioux Falls; recording secretary, Mrs. Frank Mock, Newark; treasurer, Miss Laura Sexauer, Brookings; secretary of state horticulture, Mr. W. A. Simmons, Courthouse, Sioux Falls; President of South Dakota Horticulture Society, Mr. R. Rulon, Yankton.

HOME OF *Seeds and Trees That Grow and Satisfy*

●

Gurney Seed and Nursery Co.

YANKTON, SOUTH DAKOTA

REPORT OF THE AWARDS COMMITTEE

by

JUANITA JORGENSEN

Jorgensen

There were 54 applications received for state contests, and 21 awards and honorable mentions made as follows:

National Council Purple Ribbon for Flower Show—2 entries, from Watertown Garden Club and Petal Pals Garden Club, Brookings.

State Flower Show Awards—2 entries—Purple ribbons to Watertown Garden Club and Petal Pals Garden Club, Brookings.

Civic Achievement—2 entries—Rural Garden Circle, Crooks, Green Ribbon for church plantings; Colome Federated Garden Club, Colome, honorable mention.

Garden Therapy—Blossom and Bulb Garden Club, Miller, green ribbon.

Junior Promotion—Fair City Garden Club, Huron, white ribbon for work with school children; Lyons Garden Club, Lyons, honorable mention for birdhouse contest.

Junior Awards: Achievement—Garden Gophers, Rapid City, yellow ribbon; Year Book—Junior Gardeners, Dell Rapids, blue ribbon; Nature Scrapbook — Jeannine Woodward, Jolly Garden Juniors, Hurley, green ribbon.

Year Books—33 entries, the largest in our history, and the best. Two of the booklets arrived too late for judging. At least a dozen were worthy of blue ribbons and the final decision was left in the hands of a committee composed of Mrs. Edgar Irving and Mrs. Josephine Bro, Omaha, and Mr. L. S. Bush, Yankton. Madison Garden Club, Madison, blue ribbon (this will be sent to National Council for the national contest).

Winner Garden Club, Winner, red ribbon; Green Thumb Garden Club, Hurley, white ribbon; Lyons Garden Club, Lyons, honorable mention; Colome Federated Club, Colome, honorable mention; Viborg Garden Club, Viborg, honorable mention.

Other books received were: Blossom and Bulb, Brookings; Centerville Community of Miller, Dell Rapids, Fair City, Garden Gate, Green Fingers, Groton, Home, Irene, Kidder, Langford, Mobridge, Pasque, Petal Pals, Pierre, Rainbow, Rural Garden Circle, State-A-Plant, Sioux Falls, Sunshine, Tri-State, Vermillion, Watertown, Yankton and Claremont.

Scrapbooks—9 entries—Countryside Garden Club, Highmore, blue ribbon; Green Thumb Garden Club, red ribbon; Dell Rapids Garden Club, white ribbon; others were: Winner, Blossom and Bulb, Hoe and Hope, Lyons, Pasque and Petal Pals.

Horticultural Achievement Award—Groton Garden Club, Groton, pink ribbon for flowering crab promotion, and $3.00 cash donation.

Winner Garden Club, Winner, honorable mention for rose garden.

NEWSLANTS—

(*Continued from page* 51)

out. Has this condition been noticed anywhere else in the Dakotas?

I have also on my desk this morning a copy of a three-page mimeographed circular by Wayne J. Colberg, Extension Entomologist, and Vance Goodfellow, Assistant State Entomologist. The title of this circular is "Insect Pests of Shade Trees and Ornamentals." The control and insecticides for aphids, cankerworms, forest tent caterpillars, leafhoppers, rose curculio, Red Spider Mite, plant bugs, sawflies, pine needle scale, gladiolus thrips, scale insects and Boxelder bugs, are covered briefly but in my opinion adequately. If any of you would like to have this up-to-date mimeographed circular on the control of these insects, drop a postcard to either Wayne J. Colberg or Vance Goodfellow at the North Dakota Agricultural College. I am sure they will be glad to send you a copy.

Along with the membership dues which come in with our form letter, we often find a little note pinned to the check. These are very much appreciated no matter how brief, and we want to say thank you this month to Mr. J. F. Davis, Jr., of Dickinson and Mrs. Walter M. Bailey of Bismarck.

Along the same line we have a letter from Charles D. Mandigo, a long time member from Bismarck, who includes the following paragraphs in one of his letters. "Fifteen years ago I planted a honey locust seed that you sent me from a tree at Fargo and I now have a tree that is producing seeds. A year ago I sent 50 seedlings to a brother-in-law. This spring I will send him another 50. Also this spring I will plant another bunch of seeds." This type of thing is very gratifying. I often wonder how many people have grown trees of the honey locust from seed I sent them back in the late thirties. I also wonder how many of the 4-H boys and girls to whom I sent packages of black walnuts and horse chestnuts now have trees producing seed. I know of a few who have reported to me that their trees were producing.

As a closing shot we are taking an article from the May issue of the Green Thumb. This in turn was taken from the "History of Plants, Herbs, Flowers, with Their Several Names Whether Greek, Latine, or English," and written by William Coles in 1657.

"And if Gentlemen who have little else to doe, would be ruled by me, I would advise them to spend their spare time in their Gardens; either in digging, setting, weeding, or the like, than which there is no better way in the world to preserve health. If a man want an Appetite to his Victualls, the smell of the Earth new turned up, by digging with a Spade will produce it, and if he be inclined to a Consumption it will recover him. Gentlewomen, if the ground be not too wet, may doe themselves much good by kneeling upon a cushion and weeding. And thus both sexes might divert themselves from Idleness, and evill Company, which oftentimes prove the ruin of many ingenious people."

EXPERIENCES IN HORTICULTURE—

(*Continued from page* 54)

would think cultivating and otherwise fussing around the orchard would be unnecessary. However, precaution has to be taken as we still live in North Dakota.

GARDEN CLUB GLEANINGS

by

MRS. R. G. FERRIS

A brief summary of the convention by Mrs. Frank Mock: It was a success. Members of 18 clubs, with 10 of them located in our northeast corner of South Dakota, saw the convention at work and became acquainted with the officers and members of the two groups. All local churches, and some from nearby towns, had representatives to hear Mrs. Hausen's program on church flower arrangements. Visitors from a 100-mile radius heard the lectures on fruit growing. All agree that they enjoyed the talks, the flowers, the reports and the friends made. Our business men and the various organizations of Britton are well pleased and generous in their praise of these fine groups. We, the Garden Clubs of Britton, want you to come again in the future some time, to a larger and even better convention.

Vermillion—Yankton Iris Show, marked success. The first accredited iris show and spring flower festival sponsored jointly by the Yankton and Vermillion garden clubs in cooperation with the American Iris Society, was acclaimed a success by the hundreds of visitors who viewed the show at the Baptist church in Vermillion. The silver and bronze certificate and the purple rosette ribbon from the American Iris Society were awarded winners in this show.

The Rapid City Garden Club always have a 7 o'clock pot luck supper, continued by educational programs, and a question and answer period. Main projects of 1952-53 are not completed but will be continued throughout the coming year.

Highway plantings of Hopa Crab along new road from air base into Rapid City: foundation plantings and rose gardens around new Bennett Memorial Hospital and sponsoring garden therapy work with Fort Meade Hospital are some of the projects reported by Mrs. A. Schamber.

The Country Garden Club of Centerville invited three other clubs to be their guests at Memorial Hall for a program of rose gardens and culture of roses. The rose theme was carried out by the decorating and luncheon committees.

In keeping with what will be their annual custom of planting something to beautify the town, the members of the Irene Garden Club planted two fine Schwedler Maples in the Irene park at the stone bridge in observance of Arbor Day.

Viborg Garden Club writes of a most enjoyable meeting with an exchange of May baskets filled with plants, bulbs, etc.

Pasque Garden Club of Wakonda now has 27 members. Baskets of flowers were delivered to shut-ins for Mother's Day. As a civic project shrubs and perennials were planted in the park, and annuals and glads for later blooming.

Winner Garden Club planted a rose memorial garden. They practice garden therapy by taking flowers to the sick, furnishing flowers for their churches every Sunday, also flowers for weddings, receptions, clubs and lodges. Mrs. C. E. Lange has 120 varieties of catalogued iris and Mrs. Moyer about 60. "We invite the public to see our gardens at all times and are generous in sharing our plants and bulbs. Four of our members went to the National convention at San Francisco and we are very busy and very much alive," writes Mrs. Chris Nielsen.

The Petal Pals Garden Club of Aurora is furnishing 8 slides for the state slide library, sending articles to the State Hospital at Yankton, and boxes of canned goods and clothes to the Children's Hospital in Sioux Falls.

The Sunshine Garden Club of Highmore held a Tulip Tea and plant sale which was well attended and reported a success. They replaced a dead evergreen tree in the auditorium planting this spring.

Triangle Garden Club of Claremont sent in their new officers, with Mrs. Sam Curr as president; Mrs. Robert Matheny, vice president; Mrs. Hjalmer Lilja, secretary; and Mrs. Robert Schuller, treasurer.

The Community Gardeners of Timber Lake are a new member of the Federation, starting with 19 members. We hope to have more about this club in the next issue.

Sioux Falls, South Sioux Falls and Dell Rapids all held their annual peony and spring flower shows the third week in June. In spite of the unseasonable hot weather well-grown specimens, beautiful spring flowers, and fine flower arrangements were displayed.

YOUNG TREES MUST BE BABIED

by

DR. A. N. PRATT

in Tennessee Horticulture

Young mothers (so we're told) are anxious for their offspring to get old enough to "look after themselves." Over and over we've heard the complaint that young trees—newly-set orchards and especially replant trees in older orchards—just can't get started. Young trees must be babied. They're bottle-fed; all of the mineral elements they need for growth must be in solution and absorbed through the walls of root hairs. So, ample water is a must item—much more important than the kind or amount of the nutrients available.

The late Prof. M. A. Blake, eminent horticulturist of the New Jersey Station, maintained that a young peach tree kept thoroughly cultivated, free from weed or grass competition, would grow as much in two years as an uncultivated or poorly-tended peach tree would in three. We should remember that a newly-set tree does not have as many feeding roots as a tomato plant and even a poor dirt farmer knows better than to let his tomato plants compete with weeds or grass. Frequent, shallow cultivation over and beyond the root zone is essential to give the baby tree *all* of the moisture in this area.

The root system of the baby tree is quite shallow—no deeper than most annual weeds. The tree is a woody perennial, and the extension of its roots is slow, because it must take time to mature this wood tissue. During its first growing season the young tree can get only those nutrients in the two, three or four cubic feet of soil occupied by its roots. In 95 out of 100 orchard soils, nitrogen is the only limiting element. It is readily soluble and leaches downward through the upper soil layers rather quickly. Even if an ample supply of nitrate were applied over the root zone of the baby tree, much of it would leach down too quickly for the limited roots to absorb it, and it would pass below the roots—wasted. For this reason the young tree—just like a baby—must be fed often. Two or three nitrogen feedings (a quarter to a third of a pound of nitrate of

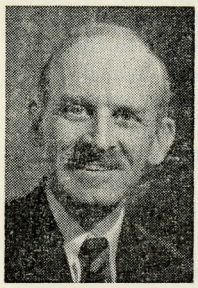
(*Continued on page* 64)

LESSONS LEARNED IN THE FAR NORTH

by

PERCY H. WRIGHT
Moose Range, Sask., Canada

from his paper before the Iowa Society



Wright

In 24 years of rose growing in Saskatchewan what have I learned that is of interest to rose growers far south of me, in a location with a very different climate? Probably a great deal more, in principal, than I myself know, for to tell rosarians of the south what I have learned, I should rightly have some experience of your area, or at least of a warmer climate somewhere.

I know very little about the hybrid teas, for the hybrid perpetuals are themselves such a problem in wintering that I suppose I have planted ten hybrid perpetuals to every hybrid tea. I am aware, of course, that the problem of hardiness interests the rose men of the northern tier of states, and in a broad area of the western prairies, where our cold Canadian winds, unhampered by any mountain ranges or Custom barriers, descend comparatively far south. In realizing that we are under a handicap in the matter of hardiness, I do not think that we of the western plains should pity ourselves at all, for there are many factors to compensate, including a soil at or near the world's best, and a comparative freedom from pests and diseases. Besides, what we have to give our rose plants special care, we gain in valuing them more on account of our care. Is it not true that any plant that grows like a weed is valued lightly? If this were not a principle of things or if the plants could be grown only from seed that was hard to germinate, would we not be giving the bright and floriferous sow thistle a place in the corner of our gardens—or perhaps the dandelion? In the 1948 issue of the American Rose Annual there is an article in which the writer expressed disbelief in the possibility of combining hardiness and late fall blooming in the rose. What he says sounds like good sense for isn't that just what one would expect, the fact that a rose plant is caught by winter in full bloom, with buds enough ready for six months of summer, to be evidence that it is unready for winter? So it would be in almost any other woody plant, and it is undoubtedly our experience with the generality of woody plants that makes us tend to consider that fall bloom and hardiness are incompatible. However, just as the genus rose is the exception in its cytology, so it is in this matter also. Take the rugosa variety, Hansa, for an example, a rose that I believe to be familiar to many rosarians of the northern plains states. Last year, on my nursery, it was in full bloom on September 20th, about the date that the first fall frosts appeared. Within two weeks of this time, fall frosts were nightly and heavy, and within another month "freeze-up" had descended and a winter that was to see -50 had begun. And yet, this spring, all my Hansa plants are completely undamaged, alive and bursting with buds to the tips, although they had no protection whatever, snow over the base of the plants, of course, but nothing over the tops, not even shelter from the arctic wind.

It seems like a miracle and it is a miracle. I know of only one other woody plant that does the same thing and that is our Buttercup Bush, Potentilla Fruiticosa. It is always in bloom in early September, the date when our first frost occurs in the average year. The phenomenon of combining abundant fall bloom and hardiness finds its most striking exemplification in Hansa, but it is evident in other roses, too, in all Rugosa hybrids to some extent. Last fall—every fall, in fact—the variety F. J. Grootendorst was in abundant bloom. It makes such a display at that time that it is the sensation of every passer-by, and actually does more to advertise my rose plant business to the neighborhood than all my other roses together. Of course, it is not as hardy as Hansa, but last winter it was hardy to the snow line and it is capable of making enough growth, even when killed to the ground, that the bloom by fall is again its normal self. I have got this variety on its own roots, which may make some difference. Schneezwerg, which I sell contrary to regulations under the name "Snowdwarf," is another and so is Mrs. Anthony Waterer. The latter is a full sister to Hansa, though an English origination rather than German. They are both probably Rosa Regosa by General Jacqueminot.

There is at least one species rose, Rosa beggeriana, from the Himalayan region, which is in abundant bloom when frost hits every fall. I have had it above the snow line for two winters now and it has never been even tip injured. Just yesterday, when I happened to have the opinion quoted from the American Rose Annual fresh in mind, I happened to be passing a spot where I planted out one of the yellow Brownell roses in the spring of 1948. Because it was a considerable way out in the field, I had left it unprotected. There it was uninjured, with frozen buds and half open blooms on it, alive to the tips. I do not mean to imply that this variety is as hardy as the Rugosas by any means, for it is not over a foot high, and being in a low spot, had undoutbedly been covered by the first snowdrift of winter. Under the snow, temperatures often remain comparatively high, even when our near-arctic winter prevails a few inches overhead, and for months on a stretch.

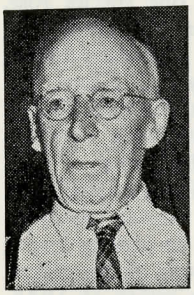
There is a seepage of heat from the ground below and this, if the snow comes early enough, is often sufficient to keep the temperature at the surface, about 10 to 15 degrees, the whole winter through. It must be about this, for small potatoes left unpicked, if covered with a few inches of soil, sometimes come through the winter unfrozen. This Brownell rose of mine probably had to endure nothing colder than zero, if that much. Hansa goes one better in preparing for a -50 winter when caught in full bloom, whereas the Brownell rose only prepared itself for zero. But it was caught in full bloom and that is something. I wonder what would happen to one of our native roses, R. macounii for instance, if caught by the equivalent of the heavy fall frosts in June when in full bloom. What would happen to an apple tree? I admit that I was surprised when I saw the Brownell rose. Usually my tender roses, whether hybrid teas, hybrid perpetuals, or Polyanthas, kill to the ground line in winter. I always set out the plant on a slant, a device whereby I avoid getting the root into the sterile subsoil, and yet get the point of the union or graft about four

(*Continued on page* 63)

SECRETARY'S CORNER

by

W. A. SIMMONS



W. A. Simmons

Dr. Leon C. Snyder, extension horticulturist at the University of Minnesota since 1945, will succeed W. H. Alderman as head of the department of horticulture at Minnesota, effective July 1.

Alderman will retire on June 30 after 34 years at the University of Minnesota, during which time he has distinguished himself for the work he has directed in breeding fruits, vegetables and flowers.

Dr. Snyder has become well known to thousands of Minnesotans through press, radio and television and through appearances at meetings in bringing the results of horticultural research to farmers and gardeners.

He came to Minnesota from South Dakota State College, where he was assistant professor in horticulture. Previously he had taught botany at the University of Wyoming.

A native of Shepherd, Michigan, Dr. Snyder did undergraduate and graduate work in horticulture and botany at the University of Washington, from which institution he received the Ph.D. degree in 1935.

Dr. Snyder has authored numerous bulletins, circulars and scientific papers. We congratulate Minnesota on the wisdom of their choice.

June 25th—Have just returned from a very fine meeting at Britton where the very kind garden club ladies fairly spoiled me. It is wonderful to meet so many old friends and to make so many gracious new ones. Arriving Sunday afternoon I was quartered in a most hospitable home, then to the palatial home of Dr. Drissem, where we were served a fine dinner. A ball game was on that evening and we were invited to see it free. The game was played in fairly world series style and resulted in a score of 1 to 0. It reminded me of our Northern League games, it was so different. There were only a few bases on balls and almost no errors and the playing field was about perfect.

Monday morning the first session was opened almost on time and we were given a warm welcome by hizzoner the mayor, Mrs. Baughman making the response. The president's address and other routine matters were gotten out of our system, then President Monteith took over and Mrs. Mock gave an interesting account of the last meeting. Mrs. Francis Nelson, second veep gave her report and Miss Laura Sexauer, the treasurer, confessed to having a nice sized bank account. Mrs. Edgar Irving, our Regional Director, was present and gave several interesting talks. In fact the entire program was good, barring a few ladies with poor terminal facilities, who should have had the bung-starter swung on them, but perhaps they have talkative husbands, and don't have much of a chance to talk, at home.

At the banquet, Monday night, Miss Zada Purrington gave a fine reading, making fun of some of our earnest flower arrangers. Judge Harold King told of the history of Fort Sisseton, telling of the foolish moves of our army brass, which talk I hope to have him write out, so others may enjoy it. Mr. Dybvig presented the Robertson Memorial gold medal award to Mr. Harry Woodward, which you will find on another page. Tuesday we had a president's breakfast in one of the churches which they allowed Mr. Wallner and I to attend, where the many presidents told of the accomplishments of their clubs. At the morning session we had fine talks by Mr. Wodarz, president of the North Dakota Society, Mr. Louis Block of the famous Block orchards at Ortonville, Minnesota, and Mr. Eldred Buer, of Canby, Minnesota, whose wonderful garden we were to see on our tour. Dr. S. A. McCrory of State College gave a very fine talk, telling of the things he is doing there. All through the sessions, whenever a speaker would finish, the local ladies would declare a "coffee break," serving coffee and cookies in the ante-room, which kept us awake and ready to absorb more learning.

On Wednesday morning we reluctlantly said goodbye to Mrs. A. C. Bonham and the many others that had done so much to entertain us, and started on the tour that had been so carefully timed and arranged by Mr. Woodward and his forces. They overlooked no chance to show us the beauties of this lake region that they have done so much to beautify. Many who were seeing this portion of the state for the first time felt like saying, "Why didn't someone tell me about this." They had thought that only the Black Hills was worthy of the tourists notice. The lady that brought me to the meeting, a particular friend named Jessie, said she considered every portion of our state beautiful. We saw old Fort Sisseton, rapidly going to pieces again, since no use is being made of it, when it would make such an ideal home for seniles.

Then stops were made at many lovely lakes, where gulls were soaring over them, in search of flying insects and shore birds and ducks were carrying on their summer housekeeping duties. Usually a stop of a half hour was made at each summer resort except at the one made at noon, where a slightly longer time was required to attend to the lunch that had been provided for us. Our last stop in our state was made at Hartford Beach on Big Stone Lake, where a lovely spot has been created.

We then went over into Minnesota at Ortonville, which we regretted to see had been visited by a hail storm the evening before, but we were glad it had not extended as far north as the Block orchard. Here Mr. Louis Block acted as host and conducted us over a portion of his large orchard, chiefly among the pear trees. We all felt we would like to inspect the orchard when the fruit was ripe. From here we went south to the home of Mr. and Mrs. Eldred Buer, near Canby, Minnesota. Here we saw a bewildering display of seldom seen flowers, all neatly labelled, so we would not have to betray our ignorance by asking what were the names of the plants.

After seeing the gardens, ice cream and cake were served to us. This ended the tour and the caravan was turned loose on an unprotected countryside, to make their way home and tell their fellow members that had stayed home, how much they had missed.

Mr. Rulon has sent me a few copies of the history of the Horticultural Society. Will mail copies of this to those asking for them, as long as they last.

GARDEN NOTES

by

VICTOR H. RIES

Mulches are the modern counterpart of cultivation. In the old days we felt that we had to cultivate to keep the surface of the soil loose to take in rainfall. A mulch of organic material does a better job. In the olden times we used to think we had to cultivate to control weeds; a mulch does a better job. And in the old days we thought it was necessary to cultivate to loosen and aerate the soil. We know now that cultivation does not do this since the soil where the roots are growing cannot be loosened by cultivation. This aeration can only be done ahead of time by incorporating organic matter with the soil previous to planting.

A mulch has an additional advantage that cultivation never could have. During the hot summer weather when the soil temperatures get up into the 70's and possibly 80's, we find that the roots of many plants go dormant and the plants stop growing. A layer of 1" to 3" of organic matter acts the same as the insulation in our houses and tends to keep the soil cooler. This prolongs root growth during the summer.

Again, in the old days they used to tell us that cultivation conserved soil moisture. It was therefore necessary to maintain a very fine pulverization of the surface soil. Now, the soils men tell us that there is very little water loss through the surface and that therefore, this old idea of maintaining a dust mulch was far better for the waist line than it was for moisture conservation. Besides, it is a tremendous waste of energy.

This brings us to the question of what organic materials we would use for a mulch. Tests at the Horticultural Department, Ohio State University, showed chopped corncobs gave the best results, with other undecomposed plant materials such as straw, clover chaff, alfalfa chaff being runners-up. The reason for their being the best is that the soil underneath the mulch, even though it be a heavy clay, is loosened and aerated by becoming more granular, or if you prefer the term, it contains more crumbs. This occurs usually within two weeks after the application of the mulch in the spring. This granulation gradually disappears so by the end of the growing season the soil is back to its normal heavy state. In the meantime, however, the roots have had a chance to grow through the clay far better than if it had not been granulated by the mulch.

Other mulch materials that may be used include peat moss, rotted leaves, saw dust (either fresh or weathered), buckwheat hulls, rotted manure and also spent hops from the brewery, or whatever else may be obtainable. Grass clippings may be used, but they are best left on the lawns.

When the material is not decomposed, as in the case of corncobs, straw and sawdust, and not containing nitrogen, as in the case of clover and alfalfa chaff, it is necessary to supply additional nitrogen to the soil to feed the bacteria while they decompose the mulch. If this is not done, the plants will suffer from nitrogen starvation and be stunted, with sickly-looking foliage.

Probably the best time to apply a mulch is in mid-spring after the ground has lost its excess moisture by drainage and little by evaporation. An inch layer is the minimum with up to 3 and 4 inch layers being effective. This mulch is left intact throughout the winter. The following spring more mulch can be added or the old mulch can be spaded into the soil as deeply as the roots of the plants will permit and a completely new mulch added.

With the exception of mulch materials from legumes such as clover chaff and alfalfa chaff, the mulch will have practically no fertilizing value. This calls for the mixing of a complete commercial fertilizer such as a 4-12-8 with the soil before planting. Use 3 to 4 pounds per 100 square feet. At least one application should be made each year, preferably in the early spring about the time growth is starting.

Remember, mulching is the modern method of cultivation.

LESSONS LEARNED IN THE FAR NORTH—

(*Continued from page* 61)

inches under ground. This means that even if the plant does kill to the ground line, there is enough of the named variety below ground to come up again and bloom with a fair amount of freedom by midsummer.

YOUR YARD AND GARDEN

(*Continued from page* 53)

Head lettuce and leaf lettuce are recognized as the two important types. In general, leaf lettuce is easier to grow, and has found greater popularity in the home garden.

Lettuce is a cool season vegetable. Excessive hot weather causes plants to bolt and form seedstalks. Cool, damp weather followed by dry, sunny weather will often cause tipburn. This condition is recognized by a brown dieback along the margins of the leaves. In areas where extreme hot weather is a problem during summer months, it helps to start head lettuce in a greenhouse, hotbed or coldframe about March 15. Plants can be transplanted outdoors in early May or at about the time the second early planting of vegetables is made.

Slobolt is the best of the leaf lettuce varieties available. This variety compares favorably with head lettuce varieties in flavor and quality. It's favorable characteristics are its ability to stand considerable hot weather without bolting and its ability to remain in usable condition in the garden over a long period of time.

Salad Bowl is a newer variety that produces a very attractive plant, but, in general, the Slobolt variety has been favored over it. These two varieties are much superior in quality to older leaf lettuce varieties still sold in the seed trade.

Home gardeners are discovering that with the advent of Slobolt leaf lettuce, there seems to be little advantage in spending the extra time needed to grow head lettuce varieties. However, there are some who prefer the heading types of lettuce. Head lettuce does well in western Montana because of generally cooler day temperatures and cooler night temperatures which are more conducive to the growing of good quality head lettuce. New York 515 is still a very popular old variety of the crisp-head type. Premier Great Lakes, Pennlake and Progress are newer varieties of this type. Pennlake appears to be the most promising of these because of its earliness and possibly greater resistance to such diseases as bottom rot of lettuce.

Lettuce should be grown in soils that are rich in organic matter. Commercial fertilizers such as treble super phosphate or ammoniated phosphate

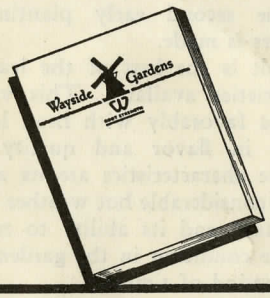
(*Continued on page* 64)

Wayside..... splendid new flowers

Don't let your garden lose its bright appeal—keep it vibrant and beautiful with the many *advanced* garden fashions offered in Wayside Gardens' new Catalog.
No other catalog in America features the vast selection of test proven, worthwhile new shrubs, roses, bulbs and hardy *"pedigreed"* root-strength plants.

... and remember, when you order from Wayside Gardens, you are assured of getting only the finest quality, top-notch, *"pedigreed"* stock. This guaranteed superior quality is the deciding factor in garden success, it is your protection against garden failure.

SEND FOR THE WORLD'S FINEST HORTICULTURAL BOOK-CATALOG



Almost 200 pages, with hundreds of flowers illustrated in their natural colors. Thousands of gardeners rely on this book, year after year, as their source book of ideas and the finest worthwhile new plants. Complete cultural instructions for each item. To be sure you get your copy it is necessary that you enclose with your request 50¢, coin or stamps, to cover postage and handling costs.

MENTOR AVE. MENTOR, OHIO

Wayside Gardens

YOUNG TREES MUST BE BABIED—

(*Continued from page* 60)

soda) at about six-week intervals, will keep some of this essential element within reach of the roots for the first three or four months of the season. After that the tree's growth should be slowed to allow its wood to ripen before winter.

We've heard growers complain that "their new trees didn't do a thing for the first two years, then started to grow like weeds." We would be willing to bet that this weed-like growing started when the baby tree had reached the age when it could "look after itself" and was not entirely dependent upon the grower's care. It started when the roots got spread and depth enough to get its food and moisture below the range of weeds and grass, or were strong enough to grab their share in fair competition.

Then there was the sentimental gal who wore a black garter in memory of the boys who had passed on beyond. —THE EARTHWORM.

YOUR YARD AND GARDEN—

(*Continued from page* 63)

may be added to the soil at planting time. Lettuce is usually planted in rows spaced eighteen inches apart. Leaf lettuce may be thinned to eight inches apart. Head lettuce plants should be spaced twelve inches apart in the row. Generous applications of water during the growing period will aid in producing crisp, good quality heads.

HARDY PHLOX

To grow Phlox well be sure the soil is well-drained, deep and heavily enriched. Keep in full sun. Water freely under the foliage. It likes its feet wet and its clothing dry. In wet weather dust with sulphur to prevent mildew. Don't plant too close to stone walls—they are damp. Set far enough apart to get good air circulation. Divide the roots every three or four years to keep plants vigorous and flowers large. Destroy all seedlings—they turn to ugly magenta colors and are so vigorous they crowd out the named varieties.—THE EARTHWORM.

NEW LAWNS—

(*Continued from page* 57)

young lawn. It should be cut three times a week and your mower should never be set lower than one and three-quarters to two inches—the latter is better. Do not pick up the cuttings. You'll get some crab grass the first of July but don't worry about it. After the fall rains start, sprinkle the grass with 5 pounds of seed per 1000 square feet, Then take a bamboo lawn rake and rake the whole area hard. Roll and if the rains fail, keep wet. This will give you thousands of vigorus, small seedling grasses.

Early next spring use 25 pounds of organic fertilizer to 1000 square feet. By early we mean just after frost or before the grass gets green. Then use three pounds of seed per 1000 square feet, broom and roll as above. The next August follow the same procedure and ditto every spring and August thereafter.

Quite a job, isn't it? But your reward is a deep, velvety lawn and we thought that was what you were after.—THE EARTHWORM.